

Flow monitors, mechanical, with paddle, with switching output

SW

Mechanical paddle flow monitor **RHEASREG® SW** with switching output, in an impact-resistant plastic housing, with stainless-steel paddle, for flow monitoring of liquid and gaseous, non-aggressive media in pipes, hydraulic systems of ¾" through ½" to 8" diameter.

The flow sensor is used as a flow controller or low water alarm, e.g. for pumps in oil and cooling circuits, cooling systems, evaporators, compressors and heat exchangers, with brass or stainless-steel bodies.

TECHNICAL DATA

| | |
|-----------------------------|---|
| Switching capacity: | 15 (8) A; 24...250 V AC, at 24 V AC min. 150mA |
| Contact: | dustproof microswitch as potential-free single-pole changeover contact |
| Housing: | plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, colour traffic white (similar to RAL 9016) |
| Housing dimensions: | 108 x 70 x 73.5 mm (Thor2) |
| Base body: | galvanised steel |
| Screwed socket: | brass or stainless steel (see table) |
| Paddle: | stainless steel V4A (1.4401) |
| Cable connection: | cable gland , plastic (M20 x 1.5; with strain relief, exchangeable, inner diameter 8 - 13 mm) |
| Housing temperature: | -40...+85 °C |
| Max. temperature of medium: | +120 °C |
| Electrical connection: | 0.14 - 1.5 mm ² , via screw terminals |
| Protection class: | I (according to EN 60 730) |
| Protection type: | IP 65 (according to EN 60 529) |
| Standards: | CE conformity, EMC directive 2014 / 30 / EU, low-voltage directive 2014 / 35 / EU |

FUNCTION

| | |
|---------------|--|
| Monitor: | Contact COM-NO (red - yellow) breaks when flow rate drops to the preset value. Simultaneously, contact COM-NC (red - blue) closes and can be used as signal contact. Device is factory-set to the minimum switch-off value, which can be increased by turning the range adjusting screw clockwise. |
| Installation: | vertical in horizontal pipes, tee R x" according to DIN 2950, min. smoothing distance = 5 x pipe diameter upstream and downstream of paddle |

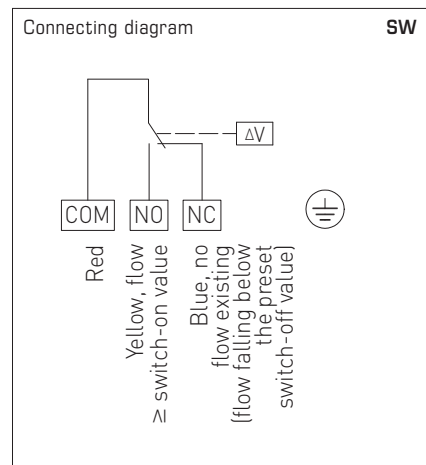
Table of switching values

| Pipe Ø DN (inches) | Paddle combination PSW-09 | Factory Setting OFF / ON (m ³ /h) | Max. Setting OFF / ON (m ³ /h) |
|--------------------|---------------------------|--|---|
| SW-1 / SW-2 | | | |
| 1" | 1 | 0.6 / 1.0 | 2.0 / 2.1 |
| 1 ¼" | 1 | 0.8 / 1.3 | 2.8 / 3.0 |
| 1 ½" | 1 | 1.1 / 1.7 | 3.7 / 4.0 |
| 2" | 1, 2 | 2.2 / 3.1 | 5.7 / 6.1 |
| 2 ½" | 1, 2 | 2.7 / 4.0 | 6.5 / 7.0 |
| 3" | 1, 2, 3 | 4.3 / 6.2 | 10.7 / 11.4 |
| 4" | 1, 2, 3 | 11.4 / 14.7 | 27.7 / 29.0 |
| 5" | 1, 2, 3, 4 | 6.1 / 8.0 | 17.3 / 18.4 |
| | 1, 2, 3 | 22.9 / 28.4 | 53.3 / 55.6 |
| 6" | 1, 2, 3, 4 | 9.3 / 12.9 | 25.2 / 26.8 |
| | 1, 2, 3 | 35.9 / 43.1 | 81.7 / 85.1 |
| 8" | 1, 2, 3, 4 | 12.3 / 16.8 | 30.6 / 32.7 |
| | 1, 2, 3 | 72.6 / 85.1 | 165.7 / 172.5 |
| SW-3 / SW-4 | | | |
| ½" | - | 0.174 / 0.48 | 0.846 / 0.948 |
| ¾" | - | 0.138 / 0.408 | 0.768 / 0.858 |



SW-3E
SW-4E

Incl. attached Tee Fitting according to DIN 2950

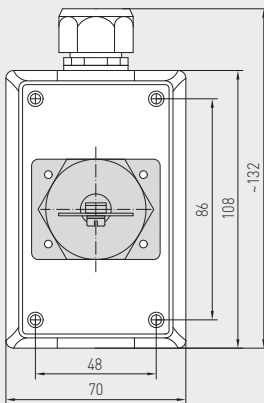
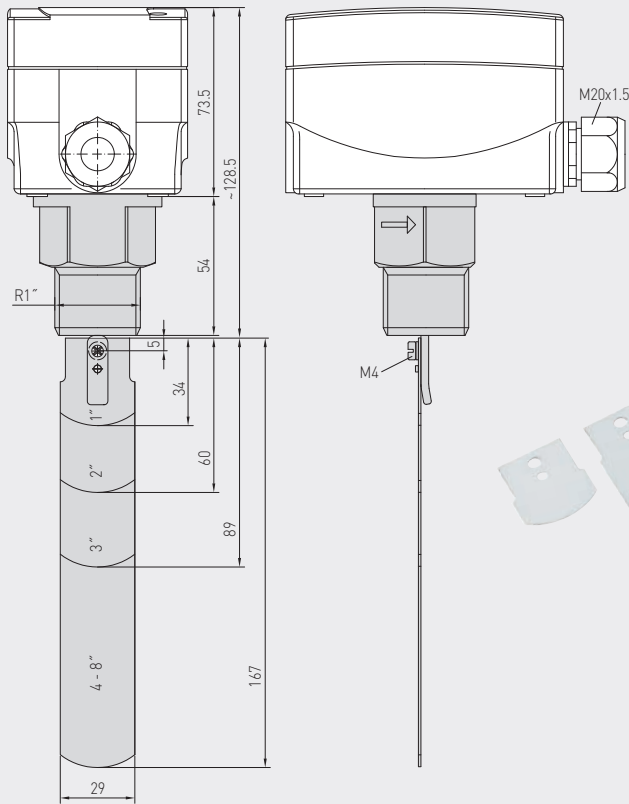




SW

Dimensional drawing

SW
PSW-09



PSW-09
Set of stainless steel
paddles (Spare part)

Pipe diameters with paddle combinations

| Pipe Ø DN (inches) | (mm) | Paddle combination PSW-09 | |
|--------------------------|--------|---------------------------------|---------------------------|
| ½" | 15 mm | – | (SW-3E incl. Tee Fitting) |
| ¾" | 20 mm | – | (SW-4E incl. Tee Fitting) |
| 1" | 25 mm | 1 | |
| 1 ¼" | 32 mm | 1 | |
| 1 ½" | 40 mm | 1 | |
| 2" | 50 mm | 1, 2 | |
| 2 ½" | 65 mm | 1, 2 | |
| 3" | 80 mm | 1, 2, 3 | |
| 4" | 100 mm | 1, 2, 3 plus 4 | (shorten to 92 mm) |
| 5" | 125 mm | 1, 2, 3 plus 4 | (shorten to 117 mm) |
| 6" | 150 mm | 1, 2, 3 plus 4 | (shorten to 143 mm) |
| 8" | 200 mm | 1, 2, 3 plus 4 | (unshortened) |

RHEASREG® SW Flow monitors, mechanical, with paddle

| Type/ WG01 | Pipe Ø DN | Max. Operating Pressure PN max | Medium | (Contacting Parts Made of) | Incl. attached Tee Fitting according to DIN 2950 | Item No. | Price |
|-------------------|--|--------------------------------------|------------|----------------------------------|--|--------------------|----------|
| SW | | | | | | | |
| SW-1E | 1" - 8" | 11 bar | normal | (brass) | – | 1702-3011-0000-000 | 140,60 € |
| SW-2E | 1" - 8" | 30 bar | aggressive | (stainless steel V4A) | – | 1702-3012-0101-000 | 523,95 € |
| SW-3E | ½" | 11 bar | normal | (brass) | | 1702-3013-0031-000 | 255,24 € |
| SW-4E | ¾" | 11 bar | normal | (brass) | | 1702-3014-0041-000 | 255,24 € |
| Spare part | | | | | | | |
| PSW-09 | Set of stainless steel paddles, 4 pieces, pipe Ø 1" - 8", for SW-1E and SW-2E (included in the scope of delivery) | | | | | 7700-0010-1000-000 | 21,21 € |